SPIRIN, A.A.; SALAM-ZADE, M.M.; VECHKHAYZER, G.V.

[Manual on laboratory work in high-voltage technique] Rukovodstvo k laboratornym rabotam po tekhnike vysokikh napriazhenii. Moskva, Gos. energ. izd-vo, 1953. 127 p. (MLRA 7:6)
(Electric engineering)

SALAM-ZADE, M.M.; TSEKUN, N.A.

Protection against vagrant currents. Energ.biul. no.7:14-18 Jl '53.
(MLRA 6:7)
(Electric currents, Vagrant)

SALAM-ZADE, M.M.

SPIRIN, Aleksey Andreyevich; KAL'MAN, V.S. [deceased]; SALAM-ZADE, M.M.; TSEKUN, N.A.; NAGREYEV, V.F., professor, doktor tekhnicheskikh nauk, redaktor; KADYRLI, A.M., tekhnicheskiy redaktor

[Electrical study of pipeline and cable corrosion] Metodika elektricheskikh issledovanii korrozionnogo sostoianiia truboprovodov i kabelei. Baku, Gos.nauchno-tekhn.izd-vo neft.i gorno-toplivnoi lit-ry, Azerbaidzhanskoe otd-nie, 1954. 178 p. [Microfilm] (MIRA 10:7)

(Electrolytic corrosion) (Cables) (Pipelines)

SALAM-ZADE, M.M.

SPIRIN, Aleksey Andreyevich; TSEKUN, Naum Aleksandrovich; SALAM-ZADE, Makhmud Mekhti ogly; AL'BITSKIY, B.P., professor, redaktor; UDALYY, A.M., redaktor.

[Electric protection from corrosion of underground metallic structures] Elektricheskaia zashchita podzemnykh metallicheskikh sooruzhenii ot korrosii. Baku, Azneftizdat, 1954. 262 p. (MIRA 8:4)

(Electrolytic corrosion)

SOV/112-57-9-18219

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 9, p 7 (USSR)

AUTHOR: Salamzade, M. M.

TITLE: High-Voltage Engineering and Electrical Materials Nomenclature
(Terminy po tekhnike vysokikh napryazheniy i elektricheskikh materialov)

PERIODICAL: Tr. Azerb. industr. in-ta, 1956, Nr 12, pp 166-174

ABSTRACT: Bibliographic entry.

Card 1/1

SALAMZADE, M.M.

Key to abbreviations used in electrical engineering. Trudy Azerb. ind. inst. no.17:147-153 '57. (MIRA 11:9)
(Electric engineering) (Abbreviations)

SALAMZADE, M.M.; KYAZIMZADE, Z.I.

Terminology in electrical engineering [in Russian and Azerbaijani]. Trudy Azerb. ind. inst. no.18:161-169 '57. (MIRA 11:7)
(Electrical engineering--Terminology)

SALAM-ZADE, M.M.; RUDZSKIY, Z.I.

Corrosion and anticorrosion protection of underground communications. Izv.vys.ucheb.zav.; neft' i gaz 1 no.12:131-134 '58.
(MIRA 12:4)

1. Azerbaydzhanskiy industrial'nyy institut im. M.Azizbekova.
(Corrosion and anticorrosives) (Pipelines) (Cables)

SOV/81-59-16-57481

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 16, pp 266-267 (USSR)

AUTHOR: Salam-zade, M.M.

TITLE: The Method of Electric Investigations of the Corrosion State of Underground Metal Structures

PERIODICAL: Tr. Azerb. industr. in-ta, 1958, Nr 20, pp 147-151 (Res. Azerb.)

ABSTRACT: According to the method employed in the Azerbaydzhan Industrial Institute imeni Azizbekov the corrosion state of underground metal structures is completely characterized by the results of the following electric measurements: determination of the corrosivity of the soil based on the specific resistance, distribution of potentials relative to the earth along the structure, distribution of the potentials of the structure relative to the nearest neighboring metal structures, direction of the current along the structure, density of the leakage currents from the structure, distribution of the potentials of the underground structure relative to the rails of an electric railroad and the distribution of the potentials of a close electric railroad relative to the earth. Devices are described which are used by the mentioned Institute for the listed measurements.

V. Pritula.

Card 1/1

SALAM-ZADE, M.M.

Corrosion recording devices. Izv. vys. ucheb. zav.; neft' i gaz 2 no.7:117-119 '59. (MIRA 12:12)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.
(Petroleum--Pipelines) (Gas, Natural--Pipelines)
(Electrolytic corrosion)

SALAM-ZADE, M.M.; AFONSKIY, K.N.

Reducing errors in measurements of potentials in corrosion studies. Azerb. neft. khoz. 38 no.3:40-42 Mr '59. (MIRA 12:6)
(Electrolytic corrosion)

SALAM-ZADE, M.M.;

Corrosion protection of large-diameter pipes. Azerb. neft. khoz. 39 no.6:43-45 Je '60. (MIRA 13:10)
(Pipe, Cast-iron—Cathodic protection)

NEGREYEV, V.F.; KYAZIMOV, A.M.; SALAM-ZADE, Z.M.

Protecting aluminum alloys from corrosion in aqueous alkaline solutions by means of inhibitors. Dokl. AN Azerb. SSR 20 no.3:27-30 '64. (MIRA 17:7)

1. Institut khimii AN AzerSSR.

CZECHOSLOVAKIA UDC 615.781.6-074

SALAMOUN, Miloslav; HEJLEK, Jan; Krajska Control Laboratory of the Krajsky Institute of National Health (Krajska Kontrolni Laborator KUNZ), C. Budejovice.

"Differential Identification Tests for Local Anesthetics."

Prague, Vojenske Zdravotnicke Listy, Vol 35, No 2, Apr 66, pp 65 - 67

Abstract: The authors investigated local anesthetics currently used in Czechoslovakia. Three main kinds are used: Procainum hydrochloricum, Cinchocainum hydrochloricum, and Tetracainum hydrochloricum. A specific identification test for procaine is described. It is based on a coloring resulting from the reaction of procaine with benzochloramine. The test is simple and reliable. 3 Tables, 3 Czech references.

1/1

L 44811-65 EPA(s)-2/EWT(m)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/EWA(c) Pf-4 JD/HM

ACCESSION NR: AP5010176 UR/0125/65/000/004/0023/0027

AUTHOR: Podola, N. V. (Candidate of technical sciences); Salan, V. I. (Engineer); Obolonskiy, A. P. (Engineer); Lokshin, V. Ye. (Engineer)

27

26

B

TITLE: Stabilization of electron-beam welding parameters

16

SOURCE: Avtomaticheskaya svarka, no. 4, 1965, 23-27

TOPIC TAGS: electron beam welding, welding parameter, parameter stabilization, accelerating voltage stabilizer, beam current stabilizer, weldment quality

ABSTRACT: The effect of the parameters of electron-beam welding on the quality and reproducibility of welded joints has been investigated at the Electric Welding Institute. The depth of fusion was reproduced with an accuracy of about 20% in experimental welding at an accelerating voltage of 25 kv, a current of 240 mamp, and a welding speed of 30 m/hr. Subsequent experiments were made with stabilizers of accelerating voltage and beam current the prototypes of which were developed at the Institute. Results of the experiments showed that stabilization of the accelerating voltage, the focusing lens current, and the beam current at the weld spot with an accuracy of 0.5, 0.1, and 0.5%, respectively, ensured an accuracy of at least 5% in the reproducibility of the main dimensions of the weld. On the basis of the obtained data, the stabilizers for accelerating voltage and the beam current were

Card 1/2

L 44811-65

ACCESSION NR: AP5010176

designed and built at the Institute. The accelerating voltage stability of the power source is 0.5% as the load current changes from 0 to 500 mamp and the feed voltage varies from -10 to +5%. At a feed voltage drop of -10% and a beam current of 200 and 500 mamp, the accelerating voltage recovery time is 0.05 and 0.15 sec, respectively. In field welding of 30-mm steel at a speed of 30 m/hr, an accelerating voltage of 25 kv, a current of 200 mamp, and a depth of fusion of 16 mm, the 10% drop in the feed voltage had no effect on the depth of fusion or the weld shape. The beam current stabilizer has a 10—500 mamp stabilization range and an accuracy of 0.5%. Orig. art. has: 6 figures. [MS]

ASSOCIATION: Institut elektrosvarki im. Ye. O. Patona AN UkrSSR (Electric Welding Institut, AN UkrSSR)

SUBMITTED: 24Sep64 ENCL: 00 SUB CODE: IE

NO REF SOV: 002 OTHER: 001 ATD PRESS: 3257

mpB

Card 2/2

L 5026-66 EWT(m)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/EWA(c)

ACC NR: AP5024429 SOURCE CODE: UR/0286/65/000/015/0139/0139

53
8

INVENTOR: Podola, N. V.; Salan, V. I.; Koval', A. B.
44,55 44,55 44,55

TITLE: Method of stabilizing the focal spot in electron-beam welders. Class 49, No. 173587 [announced by Electric Welding Institute im. Ye. O. Paton, AN UkrSSR (Institut electrosvarki AN UkrSSR)]
44,55 44,55

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 139

TOPIC TAGS: welding, electron beam welding, electron beam, beam focal spot, focus spot stabilization

ABSTRACT: This Author Certificate introduces a method of stabilizing the focal spot in electron-beam welders with the focusing system receiving power from the network through a rectifier and a magnetic amplifier with the network-voltage and accelerating-voltage feedback. To improve stabilization, a correcting signal proportional to the changes in accelerating voltage is fed continuously to the focusing system. [MS]

SUB CODE: IE/ SUBM DATE: 23Nov63/ ORIG REF: 000/ OTH REF: 000/

ATD PRESS: 4132

Card 1/1 UDC: 621.3.032.269.2:621.791.72

09010127

Z/031/60/000/011/005/005
A205/A026

AUTHOR: Šalanda, A.

TITLE: Insulation of Bare Areas in Hard-Chromium Plating of Formed Parts

PERIODICAL: Strojírenská výroba, 1960, No. 11, p. 559

TEXT: The article describes a modified method of preventing hard-chromium plating of arbitrary areas on formed parts, to replace the difficult and costly covering of these areas with plasticized polyvinyl tape or polymerate lacquer. The novel method consists in coating these areas with a solution of "PVC-L 58" insulation material (product of the "Fatra" Plant in Napajedla) with an addition of 10% pigmented "PVC-L 57". Both PVC solutions are delivered with a viscosity suitable for coating, but can be thinned with methylethylketone or acetone. One to four coats are applied, as desired. The solution dries within 20 minutes, the next layer can be applied after 2 hours. After plating, the PVC coats can be removed upon softening with trichlorethylene. The method described is especially suitable for combined surface treatment (chromium, cadmium and pickling) and insulates also against copper, zinc, and nickel plating of cemented or nitrided areas. The improvement suggestion was registered under file No. 86 / 58 at the "Technometra" Plant in Jihlava.

Card 1/2

Z/031/60/000/011/005/005
A205/A026

Insulation of Bare Areas in Hard-Chromium Plating of Formed Parts

ASSOCIATION: Technometra, National Enterprise, in Jihlava

Card 2/2

SALANDA, Adolf, inz.

Prague - Ankara Line. Letecky obzor 7 no.8:237 Ag '63.

SALANKI, Istvan; TOTH-ZSIGA, Istvan; VUKOV, Konstantin

Technical conference of the sugar experts in the German Democratic Republic. Cukor 13 no.8:231-233 Ag '60.

1. "Cukoripar" szerkeszto bizottsagi tagja (for Vukov).

SALANKI, Istvan, fomernok

"J"- diffusion and the question of waste waters. Cukor 11 no.5: 122-125 My'58

1.Szerencsi Cukorgyar.

SALANKI, Istvan, fomernok

Indivudually wrapped cube sugar, the new product of the Hungarian industry. Cukor 11 no.4:86-88 Ap'58

1. Szerencsi Cukorgyar.

SALANKI, Janos, (Debrecen 12, Ellettan, Hungary.)

Role of afferentation in the regulation of the slow rhythm in the periodic activity of fresh water mussels. Acta biol Hung 12 no.3:161-167 '61.

1. Institute for Animal Physiologh, Lomonosov State University, Moscow (Head: Ch. S. Koshtoyants).

KESZTYŰS L., KOLLER M. and SALÁNKI J.

Pathophysiol. Inst., med. Univ., Debrecen. *Wirkung der Neurotomie auf das Sanarelli-Shwartzmanund Arthus-Sacharow-Phänomen. Effect of neurotomy on the Sanarelli-Shwartzman and Arthur-Sacharow phenomena ACTA PHYSIOL. ACAD. SCIENT. HUNG. (Budapest) 1954, 5/suppl. (78-79)

SO: EXCERPTA MEDICA -Section II, Vol. 7, No. 10

SALANKI J.

KESZTYUS, L.; SZALAI, S.; KOCSAR, L.; KERTESZ, L.; SALANKI, J.

Nervous system and immunity. II. Possible formation of antibodies following a few seconds of antigenic stimulation. Acta microb. hung. 1 no.4:371-376 1954.

1. Institut für Pathophysiologie der Medizinischen Universität, Debrecen und Institut für experimentelle Physik der Ludwig-Kossuth-Universität, Debrecen.

(ANTIGENS AND ANTIBODIES
antibody form. in rabbits after a few seconds of antigen stimulation)

KESZTYUS, Lorand; SZALAY, Sandor; KOCSAR, Laszlo; KERTESZ, Laszlo;
SALANKI, Janos

Nervous system and immunity. II. Possible formation of antibodies after a few seconds of antigen stimulations. Kiserletes orvostud. 6 no.5:393-397 Sept 54.

1. Debreceni Orvostudomanyi Egyetem Korelettani Intezete es Debreceni Kossuth Lajos Tudomanyegyetem Kiserleti Fizikai Intezete.

(ANTIGENS AND ANTIBODIES
antibody form. in rabbits after seconds-long antigenic stimulation)

KESZTYUS, L.; SALANKI, J.; KOLLER, M.

Role of the nervous system in immunity. III. Effect of neurotomy on Arthus-Sakharov phenomenon. Acta microb. hung. 2 no.4:337-341 1955

1. Pathophysiologisches Institut der Medizinschen Universitat, Debrecen.
(ALLERGY, experimental,
Arthus phenomenon, eff. of neurotomy)
(NERVOUS SYSTEM, physiology,
eff. of neurotomy on Arthus phenomenon)

SALANKI, J.

L. Kesztyus, H. Csernyanszky, M. Koller und J. Salanki: "Nervensystem und Immunitat. II. Die Wirdung von Neurotomie und Narkose auf das Shwartzman-Phaenomen."

SO: Acta Mirrobiologica Hung. 2: 343-352, 1955, Unclassified.

SALANKI, Janos (Debrecen 12.Elettan, Hungary.)

Studies on the localization of the influence of potassium ions in connection with the regulation of the slow rhythm in the periodic activity of fresh water mussel. Acta biol Hung 12 no.2:99-106 '61.

1. Institute for Animal Physiology, Lomonosov State University, Moscow (Head: Ch.S. Koshtoyants).

*

SALANKI, Janos (Debrecen 12, Elettan, Hungary)

Role of afferentation in the regulation of the slow rhythm in the periodic activity of fresh water mussels. Acta biol Hung 12 no.3:161-167 '61

1. Institute for Animal Psychology, Lomonosov State University, Moscow (Head:Ch.S.Koshtoyants).

HUNGARY

[illegible], Ilona, B., SALANKI, Janos; Medical University, Institute of Histology and Development (Orvostudomanyi Egyetem Szovet- es Fejlodestani Intezete) (Director: TORO, Imre, Dr, Professor), Budapest, and Medical University, Physiological Institute (Orvostudomanyi Egyetem Elettani Intezete) (Institute Chief: WENT, Istvan, Dr, Professor), Debrecen,

"Cytological Study of the Central Nervous System of River Shell Fish with Special Attention to Neurosecretion."

Budapest, Biologiai Kozlemenyek, Vol 10, No 2, 62, pp 141-146.

Abstract: [Authors' English summary modified] Anodonta cygnea (LAMARCK) was the subject of the study. Cells of the cerebral, pedal and visceral ganglia contain a substance which could be stained specifically with paraldehyde fuchsin. Those cells which contained Gomori positive substances were divided into three groups based on morphological criteria. The distribution of these three groups of cells in individual ganglia was similar. Variations were considered to be reflections of different phases of neurosecretory activity. Of 10 references, 1 is Hungarian, the rest Western.

1/1

B.Baranyi, Ilona; SALANKI, Janos

Cytological examination of the nervous system of fluvial shellfishes with special regard to neurosecretion. Biol kozl 10 no.2:141-146 '62.

1. Budapesti Orvostudomanyi Egyetem Szovet- es Fejlodestani Intezete, igazgato: Dr.Toro Imre egyetemi tanar, es Orvostudomanyi Egyetem Elettani Intezete, Debrecen, intezetvezeto: Dr.Went Istvan egyetemi tanar.

LABOS, Elemer; SALANKI, Janos

The effect of alkali metal ions and alkaline earth metal ions on the rhythmic activity of glochidia of the fresh-water mussel Anodonta cygnea L. Annales biol Tihany 30:45-57 '63.

Testing double innervation in the control of the tonus of the constrictor of a fresh-water mussel (Anodonta cygnea L.). Ibid.:87-101

1. Director, Tihany Research Institute of Biology, Hungarian Academy of Sciences (for Salanki).

SALANKI, Janos

Effect of serotonin, its related compounds as well as catechol amines and certain pharmacons on the periodic activity of a fresh-water mussel (Anodonta cygnea L.) through the regulation of its nervous system. Annales biol Tihany 30:73-85 '63.

1. Director, Tihany Research Institute of Biology, Hungarian Academy of Sciences.

BARANYI, B. Ilona; SALANKI, J.

Studies on neurosecretion in the central nervous system of Anodonta cygnea. Acta biol. acad. sci. hung. 13 no.4:371-378 '63.

1. Department of Histology and Embryology, Medical University, Budapest (Head: I. Toro), and Department of Physiology, Medical University, Debrecen (Head: I. Went).

(NERVOUS SYSTEM) (HISTOLOGY)

HUNGARY

SALANKI, Janos, LABOS, Elemer; Medical University of Debrecen, Institute of Physiology (Debreceni Orvostudomanyi Egyetem, Elettani Intezet).

"Studies on the Double Innervation in the Regulation of Adductor Muscle Tone in the Clam Anodonta Cygnea L."

Budapest, Acta Physiologica Academiae Scientiarum Hungaricae, Vol XXIV, No 1, 1963, pages 55-66.

Abstract: [English article, authors' English summary modified] The responses given by the posterior adductor muscle consisting of smooth muscle fibres in the clam, to the electrical stimulation of the nerve (cerebrovisceral connectivum) running to it, and the action potentials obtainable from the isolated cerebro-visceral connectivum in response to single impulses have been investigated. On changing the stimulation parameters, significant changes have been observed in the muscle response. These are described in detail. The action potential recorded from the isolated cerebro-visceral connectivum in response to stimulation with single impulses has several, clearly distinct components. Of these, the two principal ones could be separated by changing the parameters of stimulation. It is assumed that the adductor muscle has a double, antagonistic innervation, special innervation serving not only during contraction but also for the relaxation of the muscle in the tonic state. Correspondingly, relaxation of the muscle in the tonic state is not a passive process, but appears to result from an active nervous effect. 2 Eastern European, 8 Western references.

1/1

LABOS, Elemer; NAGY, Imre Zs.; BENKO, Karoly; SALANDKI, Janos

Electrophysiological and electron micrsoscopic studies on the fibre composition of the cerebrovisceral connective o Andonta cygnea L. Annales biol Tihany 30:59-65 '63.

1. Department of Anatomy. Histology and Embryology, Medical University of Debrecen (for Nagy). 2. Central Research Laboratory, Medical University of Debrecen (for Benko). 3. Director, Tihany Research Institute of Biology. Hungarian Academy of Sciences (for Salanki).

SALANKI, Janos; LABOS, Elemer

Reflex examinations on the visceral ganglion of freshwater mussels (Anodonta cygnea L.). Biol kozl 12 no.1:33-41 '64.

1. Research Institute of Biology of the Hungarian Academy of Sciences, Tihany.

LABOS, Elemer; SALANKINE ROZSA, Katalin,dr., a biologiai tudomanyok
kandidatusa, tudomanyos munkatarsa; SALANKI, Janos, dr.

On the role of SH-groups in the rhythmic activity of adductor muscle of Glochidia. Annales biol Tihany 31:39-54 '64.

1. Research Institute of Biology of the Hungarian Academy of Sciences, Tihany. 2. Director, Research Institute of Biology of the Hungarian Academy of Sciences, Tihany (for Salanki). Submitted March 11, 1964.

LUKACSOVICS, Ferenc; SALANKI, Janos, dr.

Effect of substances influencing tissue respiration and of the temperature on the O_2 consumption of the gill tissue in Unio tumidus. Annales biol Tihany 31:55-63 '64.

1. Research Institute of Biology of the Hungarian Academy of Sciences, Tihany. 2. Director, Research Institute of Biology of the Hungarian Academy of Sciences, Tihany (for Salanki). Submitted March 13, 1964.

PECSI, Tibor; SALANKI, Janos, dr.

The role of pressure in the periodical changes of cardiac action in the fresh-water mussel (Anodonta cygnea L.). Annales biol Tihany 31:65-76 '64.

1. Director, Research Institute of Biology of the Hungarian Academy of Sciences, Tihany (for Salanki). Submitted February 28, 1964.

SALANKI, Janos, dr.

Oxygen as the specific regulator of the rhythmic activity of the fresh-water mussel (Anodonta cygnea L.). Annales biol Tihany 31:97-108 '64.

Contributions to the problem of daily rhythm in the activity of the fresh-water mussel Anodonta cygnea L. Ibid.:109-116

1. Director, Research Institute of Biology of the Hungarian Academy of Sciences, Tihany. Submitted February 5 and March 13, 1964.

SALANKI, Janos, dr.; BALLA, Laszlo

Ink-lever equipment for continuous recording of activity in mussels; mussel-actograph. Annales biol Tihany 31:117-121 '64.

1. Director, Research Institute of Biology of the Hungarian Academy of Sciences, Tihany (for Salanki). 2. Physiological Institute of Debrecen Medical University (for Balla).

SALANKI, Janos, dr.; LABOS, Elemer

Reflex investigations on the visceral ganglion of the fresh-water mussel (Anodonta cygnea L.). Annales biol Tihany 31:123-132 '64.

1. Director, Research Institute of Biology of the Hungarian Academy of Sciences, Tihany (for Salanki). Submitted February 28, 1964.

SALANKI, Janos, dr.; LABOS, Elemer; NAN, Istvan

Electrophysiological properties of the cerebrovisceral connective of the fresh-water mussel (Anodonta cygnea L.). Annales biol Tihany 31:133-145 '64.

1. Director, Research Institute of Biology of the Hungarian Academy of Sciences, Tihany (for Salanki). 2. Physiological Institute of Debrecen Medical University (for Nan.) Submitted February 21, 1964.

[illegible], [illegible], tudomanyos munkatars; SALANKI, Janos, dr.

Structural changes depending on the structural state of the adductor of the fresh-water mussel (Anodonta cygnea L.). Annales biol. Tihany 31:159-164 '64.

1. Research Institute of Biology of the Hungarian Academy of Sciences, Tihany. 2. Director, Research Institute of Biology of the Hungarian Academy of Sciences, Tihany (for Salanki).

LABOS, Elemer; SALANKI, Janos

Effect of alkali metal and alkali earth metal ions on the rhythmic activity of the glochidia of fresh-water mussels (Anodonta cygnea L.). Biol kozl 11 no.2:107-118 '64.

1. Biological Research Institute, Hungarian Academy of Sciences, Tihany; Institute of Physiology, Debrecen Medical University.

LABOS, Elemer; Dr. NAGY, Imre; BENKO, Karoly; SALANKI, Janos

Electrophysiological and electronmicroscopical data on the composition of the cerebrovisceral connective tissues of Anodonta cygnea L. Biol kozl 11 no.2 119-124 '63.

1. Biological Research Institute, Hungarian Academy of Sciences, Tihany; Institute of Histology and Embryology, Central Research Laboratory, and Institute of Physiology, Debrecen Medical University.

LABOS, E.; SALANKI, J.; KLITYNA, Galina R.

The effect of cholinotropic drugs on the rhythmic activity of glochidia of fresh-water mussel (Anodonta cygnea L.). Acta biol. Acad. sci. Hung. 15 no.2:119-128 '64

1. Biological Research Institute of the Hungarian Academy of Sciences, Tihany (Head: J. Salanki), and Institute of Physiology, Medical University, Debrecen (Head: St. Went [deceased]).

SALANKI, J.

Oxygen level as a specific regulator in the rhythmic activity of fresh-water mussel (Anodonta cygnea L.). Acta biol. acad. sci. Hung. 15 no.3:299-310 '65

1. Biological Reseach Institute of the Hungarian Academy of Sciences, Tihany (Head: J. Salanki).

NAGY, I. Zs.; SALANKI, J.

Structural changes in the adductors of the fresh-water mussel (Anodonta cygnea, L.) depending on functional conditions. Acta biol. acad. sci. Hung. 15 no.3:311-320 '65

1. Biological Research Institute of the Hungarian Academy of Sciences, Tihany (Head: J. Salanki).

~~Las~~ SALANKI, LASZLO

8

Examination of catalysts. XV. Polymerization and catalytic hydrogenation as competitive reactions. Zoltán Csürös, István Géczy, and László Salánki (Budapesti Muszaki Egyetem, Szerves Kém. Technol. Intezete, Budapest). *Magyar Tudományos Akad. Kém. Tudományok Osztályának Közleményei* 6, 403-10; *Acta Chim. Acad. Sci. Hung.* 8, No. 1-3, 283-94(1955)(in German)(English summary); cf. *C.A.* 50, 8300*i*.—Catalytic hydrogenation and polymerization were found to be parallel reactions and, depending on the conditions, one or the other is preferred. Methyl methacrylate and ethyl acrylate polymerized in the presence of catalytically activated H_2. It was not possible to polymerize acrylonitrile in the same manner. Only after the use of oxidation-reduction polymerization was it successful. When potassium peroxydisulfate was used as oxidation-reduction agent for acrylonitrile and vinyl acetate, and ammonium peroxydisulfate for styrene, the polymerization was successful. In all cases O from air was a strong inhibitor.

Nella Hellinger

B/ M.A. 40UT2
2 copies

SALANKI, Laszlo

"Silicones in the plastics and rubber industries" by P.A.J.Gate. Reviewed by Laszlo Salanki. Elektrotechnika 54 no.6:282-283 Je '61.

SALANKI, Laszlo

"Non-woven textile materials of paper-making machines" by E.O. Genzsch; a periodical article review by Laszlo Salanki. Elektrotechnika 55 no.2/3:126 F/Mr '62.

SALANKI, Laszlo

Rheologic investigation of the blown mineral-oil bitumens.
Magy kem folyoir 66 no.11:443-445 N '60.

1. Klement Gottwald Villamossagi Gyar, Budapest.

SALANKI, Laszlo; MANDY, Tamasne

Separation of resin and resin-bearing substances from phenol-resin-based synthetic materials. Magy kem lap 18 no.11:532-533 N '63.

1. Klement Gottwald Villamossagi Gyar.

S/194/62/000/007/037/160
D295/D308

AUTHORS: Hajdu, Laszló, Rónai, Béla, Salánki, Tiber, and Szücs, József

TITLE: Method and equipment for automating potentiometric titration with production accuracy

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1962, abstract 7-2-68 e (Hung. pat., cl. 42, 1, 3, no. 147383, Aug. 15, 1960)

TEXT: The object of the patent is a titration method according to which the voltage of the final titration point is connected in opposition to the voltage of the measuring circuit, as a consequence of which the output voltage of the measuring equipment becomes equal to zero when titration is completed. The equipment itself consists of a magnetic stirrer, a magnetically controlled valve, a pair of electrodes, a transformer, an electronic voltmeter, photo-elements, a stabilizer, a d.c. amplifier and a potentiometer. The addition of the measuring liquid is carried out through the electromagnetically controlled valve by means of a contact relay sensitive to polarity.

Card 1/2

Method and equipment for ...

S/194/62/000/007/037/160
D295/D308

The jacket of the valve, connected with a burette, is surrounded by a magnetic coil and is made of paramagnetic material; the valve needle has an iron core and an eccentric to regulate the admission of liquid. The magnetic stirrer is driven by a two-phase meter, the speed of which is readily controlled by varying the current phase angle. The voltage corresponding to the density of the solution tested is measured by the voltmeter via a transformer. 2 figures. [Abstracter's note: Complete translation.]

Card 2/2

SALANKI, Tibor, okleveles gepeszmernok

Some problems relating to the growth of zonal monocrystals. Elektrotechnika 56 no.3:107-112 Mr '63.

1. Villamosipari Kutato Intezet Felvezeto Laboratoriumanak tudomanyos munkatarsa, Budapest, XII., Istenhegyi u.29.

SALANKI, Tibor, okleveles gepeszmernok, tudomanyos munkatars

Some remarks about the production of large-surface p-n junctions. Elektrotechnika 57 no. 6:234-240 Je '64.

1. Semiconductor Laboratory, Research Institute of the Electric Industry, Budapest, XII., Istenhegyi ut 29.

LABOS, Elemer; SALANKINE ROZSA, Katalin, dr., a biologiai tudomanyok kandidatusa, tudomanyos munkatars; SALANKI, Janos, dr.

On the role of SH-groups in the rhythmic activity of adductor muscle of Glochidia. Annales biol Tihany 31:39-54 '64.

1. Research Institute of Biology of the Hungarian Academy of Sciences, Tihany. 2. Director, Research Institute of Biology of the Hungarian Academy of Sciences, Tihany (for Salanki).
Submitted March 11, 1964.

SALANKINE ROZSA, Katalin, dr., a biologiai tudomanyok kandidatusa, tudomanyos munkatars

The action mechanism of reserpine in the nervous system of invertebrates. Annales biol Tihany 31:77-83 '64.

Is serotonin responsible for the stimulative effect of the extracardiac nerve in Helix pomatia? Ibid.:85-96

1. Research Institute of Biology of the Hungarian Academy of Sciences, Tihany. Submitted February 25 and 22, 1964.

MOLL, Karoly, Dr.; SALANKY, Klara, Dr.

Ischias as the cause of pain in amputation stumps. Orv. hetil. 99 no.8-9: 294 23 Feb - 2 Mar 58.

1. A Hevizi Allami Gyogyfardokorhaz (igazgato: Pregun Albert dr.) Bjl Osztalyanak (foorvos: Moll Karoly dr.) kozlemenye.
(SCIATICA, compl.
lumbar sciatica in etiol. of pain in amputation stumps (Hun))
(AMPUTATION STUMPS, dis.
pain, etiol. role of lumbar sciatica (Hun))

SEMENOV, B.F.; KARASEVA, P.S.; KURANOVA, L.K.; SALANOVA, T.A.

Postvaccinal and postinfection immunity in tick-borne encephalitis. Vop. virus. 9 no.5:597-601 S-O '64.

(MIRA 18:6)

1. Moskovskiy nauchno-issledovatel'skiy institut virusnykh preparatov.

Country : CZECHOSLOVAKIA
CATEGORY :

F

ABS. JOUR. : RZhBiol., No. 3 1959, No. 10226

AUTHOR : Pokorny, J., Salanska, V.
INST. : ---
TITLE : The Lipids of Mycobacterium tuberculosis var. muris-Wells

ORIG. PUB. : Rozhl. tuberk. a nemocech. plicnich, 1958, 18, No 4, 292-297

ABSTRACT : No abstract.

CARD: 1/1

POKORNY, J.; SALANSKA, V.; SULOVA, J.

A comparative study of the lipids of virulent and nonvirulent mycobacteria. Cas.lek.cesk 101 no.2:41-47 12 Ja '62.

1. Vyzkymny ustav tuberkulozy v Praze, reditel doc. dr. R. Krivinka.

(MYCOBACTERIUM chemistry) (LIPIDS chemistry)

SALANSKIY, N M

71

PHASE I BOOK EXPLOITATION SOV/5526

Vsesoyuznoye soveshchaniye po magnitnoy strukture ferromagnetikov, Krasnoyarsk, 1958.

Magnitnaya struktura ferromagnetikov; materialy Vsesoyuznogo soveshchaniya, 10 - 16 iyunya 1958 g., Krasnoyarsk (Magnetic Structure of Ferromagnetic Substances; Materials of the All-Union Conference on the Magnetic Structure of Ferromagnetic Substances, Held in Krasnoyarsk 10 - 16 June, 1958) Novosibirsk, Izd-vo Sibirskogo otd. AN SSSR, 1960. 249 p. Errata slip inserted. 1,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut fiziki Sibirskogo otdeleniya. Komissiya po magnetizmu pri Institute fiziki metallov OFMN.

Resp. Ed.: L. V. Kirenskiy, Doctor of Physical and Mathematical Sciences; Ed.: R. L. Dudnik; Tech. Ed.: A. F. Mazurova.

PURPOSE: This collection of articles is intended for researchers in ferromagnetism and for metal scientists.

Card 1/11

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Magnetic Structure (Cont.) SOV/5526

COVERAGE: The collection contains 38 scientific articles presented at the All-Union Conference on the Magnetic Structure of Ferromagnetic Substances, held in Krasnoyarsk in June 1958. The material contains data on the magnetic structure of ferromagnetic materials and on the dynamics of the structure in relation to magnetic field changes, elastic stresses, and temperature. According to the Foreword the study of ferromagnetic materials had a successful beginning in the Soviet Union in the 1930's, was subsequently discontinued for many years, and was resumed in the 1950's. No personalities are mentioned. References accompany individual articles.

TABLE OF CONTENTS:

Foreword 3

Shur, Ya. S. [Institut fiziki metallov AN SSSR - Institute of Physics of Metals, AS USSR, Sverdlovsk]. On the Magnetic Structure of Ferromagnetic Substances 5

Card 2/11

Magnetic Structure (Cont.) SOV/5526

Evaluation of the Magnitude of the Barkhausen Jump 113

Ignatchenko, V. A., and A. M. Rodichev [Institute of Physics, Siberian Branch AS USSR, Krasnoyarsk]. On the Distribution of Barkhausen Jumps by Magnitude 123

Rodichev, A. M., N. M. Salanskiy, and V. I. Sinegubov [Institute of Physics, Siberian Branch AS USSR, Krasnoyarsk]. Statistical Distribution of Barkhausen Jumps by Duration 129

Rodichev, A. M. [Institute of Physics, Siberian Branch AS USSR, Krasnoyarsk]. Dependence of the Barkhausen Effect on the Rate of Change of the Magnetic Field 135

Ivlev, V. F., and V. M. Rudyak [Teachers Institute, Krasnoyarsk]. Measuring the Coercive Force by the Barkhausen Jump Method 143

Savchenko, M. K., and A. M. Rodichev [Institute of Physics, Siberian Branch AS USSR, Krasnoyarsk]. Simultaneous

Card 7/11

S/058/61/000/012/064/083
A058/A101

AUTHORS: Rodichev, A.M., Ignatchenko, V.A., Salanskiy, N.M.

TITLE: Evaluating the Barkhausen Jump

PERIODICAL: Referativnyy zhurnal. Fizika, no. 12, 1961, 385, abstract 12E700 (V sb. "Magnitn. struktura ferromagnetikov", Novosibirsk, Sib. otd. AN SSSR, 1960, 113 - 121)

TEXT: The Barkhausen jump is regarded as a variable magnetic dipole with magnetic moment $m=m(t)$. The emf induced by the dipole field in single-layer and multilayer measuring coils is determined. It is assumed that field H is parallel or antiparallel to domain magnetization. It is shown that incident to evaluation of the Barkhausen jump, length l of the measuring coil has a great effect on measurement results; for the error not to exceed 10%, the condition $l \gg 40D$ must be observed (D being the mean diameter of the measuring coil). Maximum accuracy can be achieved if l exceeds specimen length by 2D. It is noted that experimental setups for measuring the Barkhausen jump that do not contain special integrating elements or that have a measuring coil for a pickup can only be graduated in

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terms of dm/dt. On the basis of an experiment simulating the Barkhausen jump, it was found that the formulae of the present work can be utilized for specimens with $d \leqslant 0.6$ mm (d is specimen diameter).

L. Vinokurova

[Abstracter's note: Complete translation]

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S/200/61/000/004/004/005
D228/D305

18 1150

AUTHORS: Salanskiy, N. M., Rodichev, A. M., and Savchenko, M. K.

TITLE: The Barkhausen effect in thin molybdenum-permalloy plates

PERIODICAL: Akademiya nauk SSSR. Sibirskoye otdeleniye. Izvestiya, no. 4, 1961, 110-113

TEXT: This is a report on a series of experiments investigating the influence of many factors on the "Barkhausen discontinuities" or so called "Barkhausen steps" in thin molybdenum-permalloy plates, namely the dependence of the number of "steps" on the thickness of strip and rate of change of the magnetic field and the dependence of mean magnetic moments of steps on the thickness of the strip. The distribution of steps according to magnetic moments was also examined as well as the strength of the magnetic field, influence of direction of reverse magnetization in respect to the anisotropic axis of strips and the influence of annealing in the presence or absence of a magnetic field. After describing how the Barkhausen

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The Barkhausen effect...

effect was measured, the authors point out that the distribution of Barkhausen "discontinuities" or so called Barkhausen "steps" according to the moments is analogous with distribution in ferromagnetics not only as regards the character but also as the absolute values of the moments. If it is assumed that the area of the step envelops the whole thickness of the strip, for the strip of thickness 600 Å "steps" from 0.6 to 9.0.10^{-6} cgsm units occupy respectively an area of 0.01 - 0.15 mm^2 on the surface of the strip. Distribution of steps accordingly to magnetic moments in all strips is expressed by

$$N = N_0 e^{-am^{\frac{1}{2}}} \qquad (1)$$

where N_0 and a are constant for a given strip. The mean moment of steps depends on the thickness of the strip and in the range of thicknesses examined, it increases linearly with an increase of thickness, as if the area dimensions reversely magnetized by the step in the plane of the strip did not change and only the dimension along the thickness of the strip increases. Dependence of the mean moment of steps on the presence or absence of a magnetic

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field during annealing was not observed. The dependence of the number of steps on the thickness of strip is illustrated. The rate of increase of the number of steps with an increase in thickness is greater for strips annealed in the field than for strips annealed without a field. Extrapolation of these curves gives the disappearance of the Barkhausen effect for a thickness of 350 Å. Taking into consideration that the dimensions of steps decrease with the decreasing thickness of the strip and that some of them may be below the sensitivity of the equipment, a thickness of 350 Å should be considered as greater than the criterion of one domain. The distribution of steps according to the strength of magnetic field "H" is also given in graphic form. In contrast to ferromagnetics, for which steps appear in negative fields (when the field changes from negative to positive) steps in strips appear in positive fields and the range of fields where steps appear is smaller for strips. In conclusion the possibility of employing certain characteristics of the Barkhausen effect as a criterion of the rate of impulse reverse magnetization of strips is suggested. One step reversely magnetizes a strip at very high speed. Non-syn-

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The Barkhausen effect...

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chronism of reverse magnetization of different parts of a strip has a retarding effect. For a large number of steps, it is desired that these have critical fields as close as possible to each other so that the distribution of steps according to the field could be represented by a tight curve. The authors feel that the duration of steps appears dependent on the characteristics of impulse reverse magnetization and further experiments in this direction could be useful. There are 5 figures and 3 non-Soviet-bloc references. The references to the English-language publications read as follows: R. S. Tebble, I. C. Skidmore and W. D. Corner, Proc. Phys. Soc. A63, 739 (1950), N. C. Ford and E. W. Pugh. Journ. Appl. Phys. 30, 4, Suppl. 270 (1959).

ASSOCIATION: Institut fiziki Sibirskogo otdeleniya AN SSSR Krasnoyarsk (Institute of Physics, Siberian Division AS USSR, Krasnoyarsk)

SUBMITTED: August 12, 1960

Card 4/4

SALANSKIY, N.M.; RODICHEV, A.M.; BURAVIKHIN, V.A.

Reversible and irreversible processes in the remagnetization of single crystals of silicon iron. Fiz. met.i metalloved. 11 no.6:843-850 Je '61. (MIRA 14:6)

1. Institut fiziki metallov Sibirskogo otdeleniya AN SSSR.
(Metal crystals—Magnetic properties)

24,2200

25796
S/048/61/025/005/010/024
B104/B201

AUTHORS: Salanskiy, N. M., Rodichev, A. M., and Savchenko, M. K.

TITLE: Barkhausen effect in thin molybdenum permalloy films

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 25, no. 5, 1961, 602-605

TEXT: The present investigation was the subject of a lecture delivered at a symposium on thin ferromagnetic films (Krasnoyarsk, July 4 to 7, 1960). In the course of the experiments reported here, the films were inserted into a test coil, the outputs of which were connected to a broad-band amplifier. The magnetic reversal was attained by a continuous change of the current in a magnetic coil which was arranged coaxially with the test coil. The changing velocity was varied within a wide range. Behind the amplifier the Barkhausen pulses were integrated electronically and sorted by an eight-channel integral pulse discriminator with respect to the magnetic moments. The system allowed recording magnetic moments of $0.56 \cdot 10^{-6}$ CGSM units and over. The films (80% Ni, 17% Fe, 3% Mo) were prepared by sputtering onto glass backings (300°C) in vacuum ($4 \cdot 10^{-5}$mm Hg),

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Barkhausen effect in thin ...

and thereafter annealed at 300°C in the same vacuum. Eight films (25 · 2 mm) were prepared. Four films, no. 1 (600 Å), no. 2 (750 Å), no. 3 (850 Å), and no. 4 (1200 Å) were annealed in the laboratory in the presence of the natural magnetic field; three films, no. 5 (600 Å), no. 6 (750 Å), and no. 7 (1200 Å) were annealed in a 100-oe magnetic field which was oriented in the direction of the long side; film no. 8 (1200 Å) was annealed with a 100-oe field, oriented in perpendicular to the long side of the specimen. A disk-shaped specimen (no. 9, 11 mm in diameter) was likewise annealed in a 100-oe magnetic field. Easiest magnetizing was in all films, with the exception of no. 8, directed along the long side of the film. In case of no. 8 easiest magnetizing was directed in perpendicular to the long side. The specimens 1 - 8 were inserted with their long side in parallel to the axis of the test coil. The investigation was extended to the distribution of jumps according to their moments, jumps as a function of the film thickness, the distribution of jumps according to the field strength, and the number of jumps as a function of the rate of magnetic field change. The results are presented in diagrams. It is stated in conclusion that some of the characteristics of the effect may be used as criteria of the rate of pulsed magnetic reversal of the

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Barkhausen effect in thin ... S/048/61/025/005/010/024
B104/B201

and thereafter annealed at 300°C in the same vacuum. Eight films (25 • 2 mm) were prepared. Four films, no. 1 (600 Å), no. 2 (750 Å), no. 3 (850 Å). and no. 4 (1200 Å) were annealed in the laboratory in the presence of the natural magnetic field; three films, no. 5 (600 Å), no. 6 (750 Å), and no. 7 (1200 Å) were annealed in a 100-oe magnetic field which was oriented in the direction of the long side; film no. 8 (1200 Å) was annealed with a 100-oe field, oriented in perpendicular to the long side of the specimen. A disk-shaped specimen (no. 9, 11 mm in diameter) was likewise annealed in a 100-oe magnetic field. Easiest magnetizing was in all films, with the exception of no. 8, directed along the long side of the film. In case of no. 8 easiest magnetizing was directed in perpendicular to the long side. The specimens 1 - 8 were inserted with their long side in parallel to the axis of the test coil. The investigation was extended to the distribution of jumps according to their moments, jumps as a function of the film thickness, the distribution of jumps according to the field strength, and the number of jumps as a function of the rate of magnetic field change. The results are presented in diagrams. It is stated in conclusion that some of the characteristics of the effect may be used as criteria of the rate of pulsed magnetic reversal of the

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Barkhausen effect in thin ...

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B104/B201

films. The fastest film underwent magnetic reversal with one jump. The nonsynchronous magnetic reversal of individual parts of the film increases the time of magnetic reversal. The authors believe that the duration of the jumps is closely related to the characteristics of pulsed magnetic reversal. There are 5 figures and 3 non-Soviet-bloc references.

ASSOCIATION: Institut fiziki Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Physics, Academy of Sciences USSR)

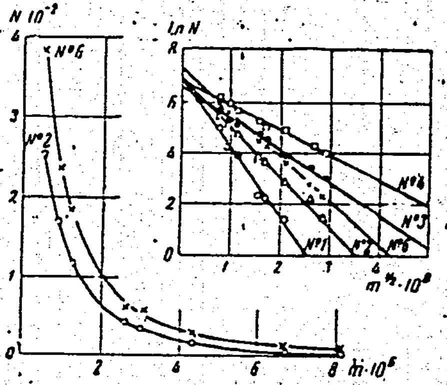

Fig. 1: Integral jump distribution versus magnetic field strength for specimens nos. 2 and 6.

Card 3/5

GITEL'ZON, I.I.; TERSKOV, I.A.; CHUMAKOVA, R.I.; SALANSKIY, N.M.

Bioluminescence of bacteria. Izv. Sib. otd. AN SSSR no.2:
125-126 '62. (MIRA 16:10)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR, Krasnoyarsk.

L 18574-63 EWT(1)/EWT(m)/EWP(q)/BDS AFFTC/ASD/ESD-3/IJP(C) GG/JD

ACCESSION NR: AP3001302 S/0181/63/005/006/1737/1740

65
62

AUTHORS: Kolotov, O. S.; Nikitina, T. N.; Salanskiy, N. M.

TITLE: Dispersion of anisotropy in thin ferromagnetic films

SOURCE: Fizika tverdogo tela, v. 5, no. 6, 1963, 1737-1740

TOPIC TAGS: dispersion, anisotropy, ferromagnetic, magnetic moment, permalloy, reversing field, magnetization

ABSTRACT: The authors investigated the change in magnetic moment of a film from the hard to the easy direction. A film of permalloy 79NMA was placed in a remagnetizing line in such a position that the reversible field was directed along the trend of difficult magnetization. The change in moment was observed at the trailing edge of the reversing pulse, which had a duration of 4 millimicroseconds. Measurements on the duration of the change from direction of difficult magnetization to that of easy magnetization proved to be independent of the value of the perpendicular magnetic field (within the limits of experimental error). The duration of this change was measured at 18 ± 4 millimicroseconds on one film, 12 ± 4 millimicroseconds on another. It becomes obvious that apparatus with greater resolving power is required for more careful

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investigations on this subject. The setup used in the investigations of the present paper has been described in the papers of O. S. Kolotov, Yu. N. Lobanov, and Z. Shil'berskiy (PTE, No. 3, 87, 1961); O. S. Kolotov, T. N. Nikitina (Izv. AN SSSR, ser. fiz., 25, 625, 1961); and O. S. Kolotov, A. A. Sanin, and Z. Shil'berskiy (PTE, No. 5, 82, 1961). "In conclusion the authors consider it their duty to express thanks to Professor R. V. Telesnin for his attention to this work and for valuable critical remarks." Orig. art. has: 1 photograph and 1 figure.

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet im. M. V. Lomonosova (Moscow State University); Institut fiziki SO AN SSSR Krasnoyarsk (Institute of Physics, SO Academy of Sciences, USSR)

SUBMITTED: 02Feb63	DATE ACQ: 01Jul63	ENCL: 00
SUB CODE: PH	NO REF SOV: 004	OTHER: 002

Card 2/2

KIRENSKIY, L.V.; SALANSKIY, N.M.; RODICHEV, A.M.

The Barkhausen effect at the approach of the hysteresis loop to a rectangle. Fiz. met. i metalloved. 16 no.4:630-632 O '63.
(MIRA 16:12)

1. Institut fiziki AN SSSR.

S/0126/64/017/001/0148/0150

ACCESSION NR: AP4013104

AUTHORS: Salanskiy, N. M.; Rodichev, A. M.

TITLE: Duration of Barkhausen pulse in ferromagnets

SOURCE: Fizika metallov i metalloved., v. 17, no. 1, 1964, 148-150

TOPIC TAGS: Barkhausen pulse, ferromagnet, reversible permeability, nickel, chromium, magnetic moment, signal noise ratio, permalloy, NGPK generator

ABSTRACT: Measurements were taken on nickel specimens 0.99 mm in diameter, and on Ni with 1% Cr specimens of varying radii (0.06, 0.12, 0.21 and 0.31 mm) to study the variation in the duration of the Barkhausen pulse with reversible permeability and changing radius. The duration of the pulse was measured by a method which was an improvement on the one given by A. M. Rodichev, N. M. Salanskiy, and V. I. Sinegubov (Izv. SO AN SSSR 1960, No. 3, 123). The duration had a threshold of 0.5 microseconds, and the time constant of the apparatus was below 0.3 microseconds. An NGPK generator was used to measure the intensity of the magnetic field. The reversible permeability was measured by the superposition of an extremely small alternating field of amplitude 10^{-2} - 10^{-3}oersteds. Experiments were also performed on permalloy tapes (80% Ni, 17% Fe, 3% Mo) 1700 Å thick to study the behavior of

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ACCESSION NR: AP4013104

the duration of the pulse at magnetic reversal. The dependence of the duration on the radius is shown in Fig. 1 of the Enclosure. The results shown in Fig. 1 agree qualitatively with those of the theoretical formula given by K. M. Polivanov, A. M. Rodichev and V. A. Ignatchenko (FMM, 1960, 9, 778)

$$\varepsilon(t) = 2\mu_0 m_0 N_0 \sum_{n=1}^{\infty} \frac{\lambda_n I_0\left(\lambda_n \frac{r}{r_0}\right)}{I_1(\lambda_n) r_0^2 \mu\mu_0\sigma} \exp\left(-\frac{\lambda_n^2 t}{r_0^2 \mu\mu_0\sigma}\right),$$

where μ_0 is $4\pi \times 10^{-7}$, m_0 - the magnitude of the variation of the magnetic moment, N_0 - the number of turns of winding per unit length, λ_n the n-th root of the Bessel function I_0, r_0 - the radius of the specimen, μ - the reversible permeability, and σ - the conductivity. Orig. art. has: 1 formula and 3 figures.

ASSOCIATION: Institut fiziki, SO AN SSSR (Institute of Physics, SO AN SSSR)

SUBMITTED: 06Aug62

ENCL: 01

SUB CODE: MM

NO REF SOV: 004

OTHER: 000

Card 2/3

ACCESSION NR: AP4013104

ENCLOSURE: 01

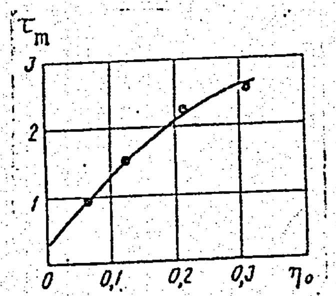

Fig. 1. Dependence of the mean duration of the Barkhausen pulse on the radius of the specimen r_o.

S/0048/64/028/001/0161/0163

AP 4010313

AUTHOR: Salanskiy, N.M.; Rodichev, A.M.

TITLE: Duration of Barkhausen pulses in ferromagnets [Report, Symposium on Questions of Ferro- and Antiferromagnetis held in Krasnoyarsk, 25 June - 7 July 1962]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.1, 1964, 161-163

TOPIC TAGS: Barkhausen jumps, Barkhausen pulses, magnetization reversal, nickel, permalloy, thin film, permeability

ABSTRACT: Investigation of the time characteristics of the Barkhausen effect is of interest because in bulk ferromagnets the duration of the Barkhausen jumps is one of the factors determining the frequency characteristics of the noise spectrum in cyclic magnetization reversal, while in the case of thin films the duration of the Barkhausen pulses can yield interesting information on the character of relaxation of the magnetic moment and the rate of displacement of domain walls. In the present work the duration of the Barkhausen pulses was measured for bulk specimens of nickel (with 1% Cr) in the form of rods with radii 0.06, 0.12, 0.21 and 0.31 mm, but all characterized by identical hysteresis loops. The duration of the pulses

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was measured by means of a somewhat improved version of the procedure described earlier (A.M.Rodichev, N.M.Salanskiy and V.I.Sinegubov, Izv.SO AN SSSR,No.3,123,1960). The experimental results are presented in the form of curves. Analogous measurements were carried out for 1700 Å thick permalloy films with the reversing field applied in the directions of easy and difficult magnetization. The mean duration of the Barkhausen pulses with the reversing field applied in the easy direction was 4.8 microsec; in the difficult direction - 1.95 microsec. This difference is attributed to differences in the Barkhausen jump mechanism. Orig.art.has: 2 formulas and 4 figures.

ASSOCIATION: Institut fiziki, Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Physics, Siberian Division, Academy of Sciences, SSSR)

SUBMITTED: 00	DATE ACQ: 10Feb64	ENCL: 00
SUB CODE: PH	NR REF SOV: 004	OTHER: 000

Card 2/2

KIRENSKIY, L.V.; SALANSKIY, N.M.; RODICHEV, A.M.

Reversible and irreversible processes in the magnetic reversal of an elastically stretched-out iron-nickel polycrystal (Barkhausen effect appearing as the hysteresis loop approaches a rectangular shape). Izv. AN SSSR. Ser. fiz. 28 no.1:164-168 Ja '64. (MIRA 17:1)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR.

AP4010315 S/0048/64/028/001/0169/0171

AUTHOR: Salanskiy, N.M.; Logutko, A.L.; Rodichev, A.M.

TITLE: Curve of equilibrium states in magnetization of a silicon iron crystal /Report, Symposium on Questions of Ferro- and Antiferromagnetism held in Krasnoyarsk, 25 June to 7 July 1962/

SOURCE: AN SSSR. Izvestiya, seriya fizicheskaya, v.28, no.1, 1964, 169-171

TOPIC TAGS: equilibrium magnetization state, ferromagnetic domain, ideal magnetization curve, domain structure, silicon iron, ferromagnet, magentic theory

ABSTRACT: The purpose of the work was to obtain the ideal magnetization curve for a cilicon iron single crystal and to investigate its domain structure in equilibrium states corresponding to different values of the external field. The purpose of the experiments was to check the thermodynamic theory of V.A.Ignatchenko, I.F.Degtyarev and Yu.V.Zakharov (Izv.AN SSSR,Ser.fiz.25,12,1961), which predicts, for a case of this type, decrease in the total number of domains and decrease in the width of the disadvantageously oriented domains. The 3.5% Si iron single crystals were etched and polished on two sides and annealed following the standard procedure. The di-

AP4010315

mensions of the specimens were 10 x 10 x 0.15 mm; this size was deliberately chosen to be close to the values used in the numerical calculations performed in the above mentioned reference. The plane of the specimens was parallel to within 1-3° to the (110) planes and one of the sides was aligned with the 100 direction. The external field was applied in this direction. From among the 80 prepared specimens there were selected four with uniform plane-parallel domain structure over the entire specimen. The equilibrium states were obtained by demagnetization with a gradually decreasing alternating field in the presence of the desired constant field. Photographs of the domain structure are reproduced. The experimental results confirm the theoretical prediction of decrease in the number of domains with increase of the applied field. The average domain width versus field curve is also close to the theoretical curve. The ideal magnetization curve obtained from ballistic measurments agrees with the magnetization curve plotted on the basis of the domain areas. Orig.art.has: 3 figures.

ASSOCIATION: Institut fiziki Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Physics, Siberian Department, Academy of Sciences, SSSR)

SUBMITTED: 00 DATE ACQ: 10Feb64 ENCL: 00

SUB CODE: PH NR REF SOV: 006 OTHER: 002

Card 2/2

FISH, A.M.; SALANSKIY, N.M.; CHUMAKOVA, E.I.

Recording ultraweak bioluminescence by noncooled photomultiplier. Trudy MOIP. Otd. biol. 21:177-180 '65. (MIRA 18:6)

L 50959-65 EWT(l)/EPA(s)-2/EWT(m)/EWP(i)/EWA(d)/T/EWP(t)/EEC(b)-2/EWP(z)/EWP(b)
Pt-7/Pi-4 IJP(c) JD/GG

ACCESSION NR: AP5011440 UR/0048/65/029/004/0604/0609

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AUTHOR: Kirenskiy, L.V.; Izotova, T.P.; Salanskiy, N.M.; Savchenko, M.K.

TITLE: Multiple layer thin ferromagnetic films /Report, Second All-Union Symposium on the Physics of Thin Ferromagnetic Films held in Irkutsk, 10-15 July 1964/

SOURCE: AN SSSR. Izvdstiya. Seriya fizicheskaya, v. 29, no. 4, 1965, 604-609

TOPIC TAGS: ferromagnetic thin film, magnetic property, hysteresis loop, ferromagnetic material 18

ABSTRACT: There have, to date, been few experimental and therotical studies of the magnetic properties and potential applications of multiple layer ferromagnetic films, yet such films have certain advantages as compared with single layer films for computer memories and other uses (better pulse characteristics, for example). The present paper describes a procedure developed for preparing multiple layer (mostly two-layer) films and gives some of the properties of such films. The coercive force was determined from oscillographed hysteresis loops; the thickness was measured by means of a universal UM-2 monochromator. The films were prepared by vacuum evaporation onto heated substrates in the presence of a 100 Oe field to produce anisotropy. The interlayers consisted of SiO_2. The three-layer films were

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deposited at 300° and were composed of 43% Fe, 50% Ni and 7% Mo, and 17% Fe, 795 Ni and 4% Mo alloys and Co (the middle layer). The two-layer films were made of 30% Fe, 45% Ni and 25% Co (high-coercivity material) and 80% Ni and 20% Fe (low-coercivity material). The film thickness in each case was determined by the crucible charge (complete evaporation). The high-coercivity alloy was deposited first at a substrate temperature of 300°; then the low-cercivity alloy at a substrate temperature of 200°C. The lower temperature was used to avoid significant magnetic anneal of the first film. The magnetic properties of the films were found to depend on the vacuum cooling regime. Films fully cooled in vacuum had a higher coercive force than films cooled in vacuum to 100°; the former also were characterized by a greater scatter of H_c values and more Barkhausen jumps in reversal. The oscillographic hysteresis loops of the double layer films are compared with the loops of single layer films of the same materials. Some of the characteristics of the films (saturation field and H_c) are given in tables and presented in the form of curves (H_c of the high-coercivity layer versus its thickness with a constant thickness low-coercivity layer and versus thickness of the low-coercivity layer with a constant h-c layer, etc.) It is concluded that it is feasible to prepare multiple layer films with reasonably stable magnetic parameters. Films consisting of layers with different coercivity exhibit stepped

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hysteresis loops. Generally multiple layer films have lower values of H_c than comparable single layer films. The value of H_c depends on the materials, the angle of the molecular beam, the order in which the successive layers are deposited and on the thickness of the layers. Orig. art. has: 4 figures and 3 tables.

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21 B

AUTHOR: Kirenskiy, L.V.; Izotova, T.P.; Salanskiy, N.M.

TITLE: Magnetic interaction of the layers of a two-layer film /Report, Second All-Union Symposium on the Physics of Thin Ferromagnetic Films held in Irkutsk, 10-15 July 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 4, 1965, 610-614

TOPIC TAGS: ferromagnetic film, magnetic property, ferromagnetic material

ABSTRACT: Two-layer films, i.e., films consisting of two ferromagnetic layers separated by an interlayer of quartz, have properties that differ from those of single films of the same material. The preparation and some of the characteristics of such two-layer films have been described elsewhere (ACCESSION NR. AP5011440). The present paper is devoted to the results of investigation of the interaction of the layers composing a two-layer film. The studied films were prepared as described earlier (thermal evaporation in vacuum) and consisted of a high-coercivity Fe-Ni-Co layer, an SiO_2 interlayer, and a low-coercivity Fe-Ni layer, having thicknesses of 1200, 2000 and 500 A, respectively. For purposes of compari-

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ACCESSION NR: AP5011441

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son there were also investigated single films of the same alloys, films coated with quartz and films deposited on a quartz layer. The domain structure was studied by means of the Kerr magneto-optical effect. The uniformity of the films was gaged by the Barkhausen effect with the aid of a setup capable of detecting Barkhausen jumps of 10^{-7} to 10^{-4} sec duration. All observations were performed with the films being reversed in the easy direction. Some of the experimental results are presented in the form of curves; also reproduced are some domain patters showing nucleation in the high-coercivity layer for different thickness of the low-coercivity layer. The observations showed that penetration of the quartz coating into the ferromagnetic layer produced addition inhomogeneities that partially block domain wall motion; this may affect some of the magnetic properties but apparently has little effect on H_c. The reduction of H_c evinced in the case of two-layer films is probably due to change in the conditions for formation and growth of reverse magnetization nuclei. The behavior and distribution of the reverse nuclei indicates the presence of non-uniform local fields. The distribution of these fields depends on the thickness of the layers, so that their effect varies with thickness. Orig. art. has: 4 figures.

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LOGUTKO, A.L.; RODICHEV, A.M.; SALANSKIY, N.M.; SMOLIN, R.P.

Measuring the duration of magnetic reversal pulses. Fiz. met. i metalloved. 20 no.2:306-308 Ag '65. (MIRA 18:9)

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